

A Bibliometric Evaluation of Global Productivity of Teledermatology Publications between 1975 and 2017 with a 3-Year Update

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Sir,

Telemedicine is a constantly evolving technique that allows medical information and services to be accessed by transferring them from hard-to-reach areas with the opportunities of modern technology. There are many studies in the literature which show that telemedicine is as effective as face-to-face evaluation.^[1] Teledermatology is one of the fastest growing branches of telemedicine thanks to modern communication technology.

Bibliometrics is statistical and holistic evaluation of scientific literature in a certain field.^[2] Although both have been popular study areas in recent years, to the best of our knowledge, only a few bibliometric reports have been published in teledermatology. In 2014, we published a study of the teledermatology productivity of the different countries, and we evaluated teledermatology publications between 1980 and 2013.^[3] A year later in 2015, we published an update to this work.^[4] Herein, we

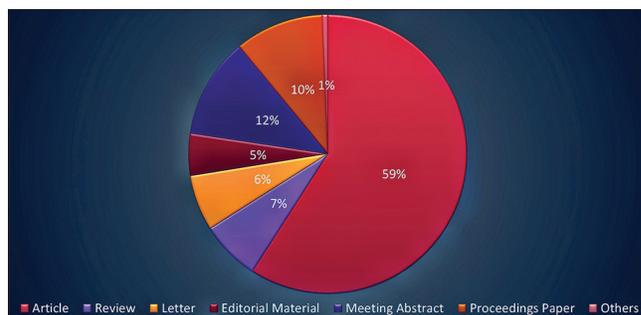


Figure 1: Distribution of teledermatology document types published between 1975 and 2016

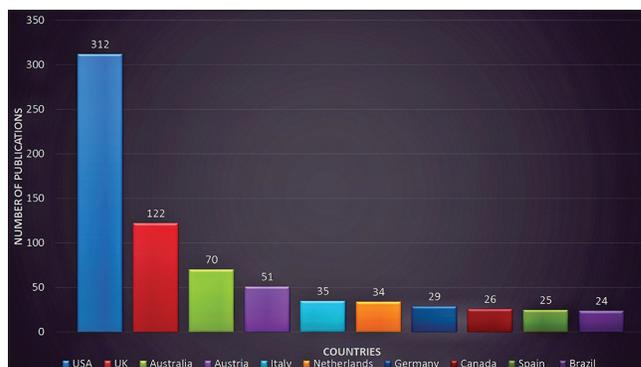


Figure 2: Top ten countries in teledermatology by total number of publications between 1975 and 2016

offer both a 3-year update, and we are expanding our work from 1975 to 2016.

The data of this study were extracted from the database of Thomson Reuters Web of Science (WoS; Thomson Reuters, New York, NY, USA). “Teledermatology” was used as the keyword to search the WoS database. All documents published after 2016 were excluded from this study. The data collected during 1975-2016 were analyzed. Publications reported from England, Wales, Northern Ireland, and Scotland were included under the United Kingdom (UK) heading.

When the teledermatology keyword was used, 791 documents published between 1975 and 2016 were found in the WoS database. Four hundred and eight-five of these documents (61.3%) were full-text articles followed by available abstracts ($n = 96$, 12%), proceeding papers ($n = 85$, 10.7%), and reviews ($n = 57$, 7.2%) [Figure 1].

According to the teledermatology publication numbers, the United States of America (USA) was the first ranked country with the highest number of publications with 312 documents. The USA produced 39.4% of the world’s teledermatology publications alone followed by the UK (15.4%), Australia (8.8%), and Austria (6.4%) [Figure 2].

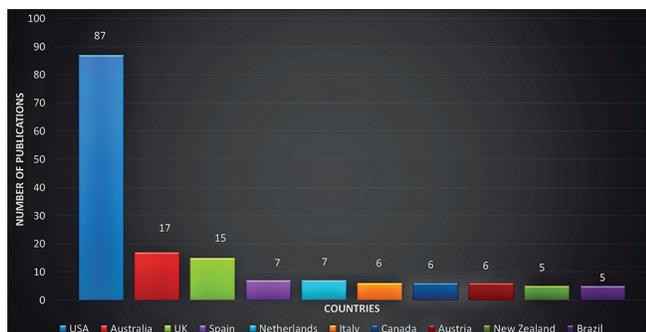


Figure 3: Top ten countries in teledermatology by total number of publications during 2015–2016

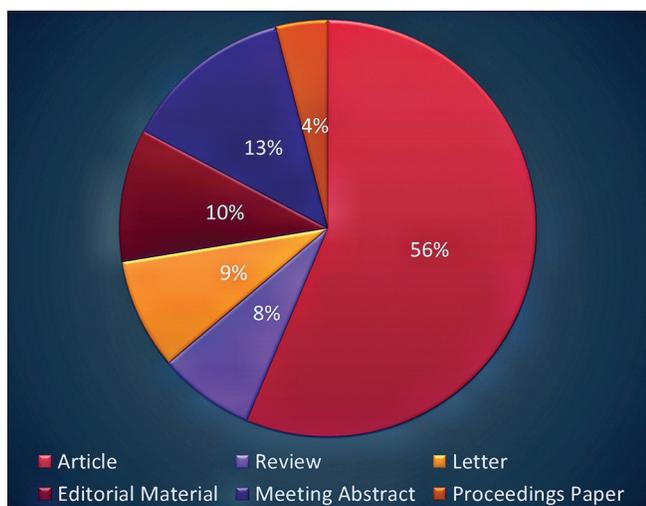


Figure 4: Distribution of teledermatology document types published between 2015 and 2016

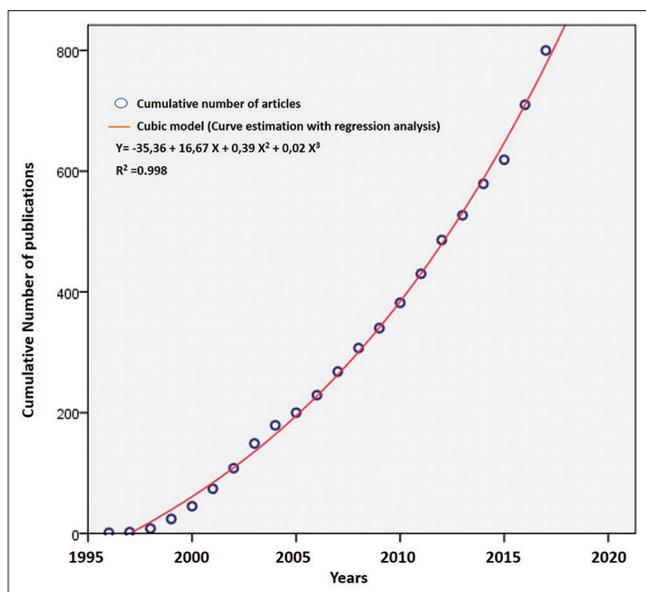


Figure 5: Cumulative number of teledermatology publications by year

Between 2015 and 2016, a total of 174 new items were published in teledermatology field and the USA ranked first again with 87 documents (50%) followed by Australia (9.8%), the UK (8.4%), and Spain (4%) [Figure 3]. Most of the documents were full-text articles ($n = 98$, 56%) followed by meeting abstracts ($n = 23$, 13.2%) and editorial materials ($n = 18$, 10.3%) [Figure 4]. By regression analysis, we estimated the publication number of the year 2017 teledermatology. We anticipated that there would be a total of 847 publications at the end of 2017 and the minimum number of publications for 2017 would be 56 (847–791) [Figure 5].

Our study has one limitation. Our search included only WoS database because it is the most reliable data service for publications and citations. In this study, we aimed to investigate the entire literature of teledermatology. We included all the teledermatology articles published since 1975 into this work because the database we used allowed us to reach the papers published up to the year 1975. In our study, we found that the majority of teledermatology publications were published by developed countries. Teledermatology, on the other hand, is a more important and necessary technology for the developing countries and for the hard-to-reach regions than it is for the developed countries. For this reason, teledermatology studies should be supported in the least developed and developing countries and physicians should be encouraged to apply teledermatology.

In the end of 2017, a total number of teledermatology documents published and indexed in WoS databases exceeded our expectation, and we detected a total of 958 items between 1975 and 2017. Although in 2016, we expected that 56 items would be published for 2017, a total number of teledermatology articles produced in 2017 doubled our expectations and 116 documents were published. The USA ranked first with 63 items as before, followed by UK and Australia (10 and 8 documents, respectively).

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Conflicts of interest

There are no conflicts of interest.

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